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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,410	09/25/2003	Kun Ho Lie		5046
38661	7590	12/09/2005		
KUN HO LIE 2430 W. MULBERRY DR. CHANDLER, AZ 85248			EXAMINER SANTIAGO CORDERO, MARIVELISSE	
			ART UNIT 2687	PAPER NUMBER

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,410	<b>Applicant(s)</b> LIE ET AL.	
	<b>Examiner</b> Marivelisse Santiago-Cordero	<b>Art Unit</b> 2687	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-6 are pending. Claim 7 was cancelled.

#### ***Claim Objections***

2. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m). See, e.g., “resistor **45**” in claim 3.

3. Claim 3 is objected to because of the following informalities: the term “rely” (last line) should be replaced with --relay--. Appropriate correction is required.
4. Claims 5-6 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. Claim 2 recites the limitation "the apparatus component called ring tone circuit controller" in lines 1-2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 3 recites the limitation "the circuitry design" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

9. Claims 1-6 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are **narrative** in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. **Note the format of the claims in the patent(s) cited.**

10. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language (note that the claims are constantly referring to figures). This claim is an omnibus type claim. See MPEP § 2173.05(r).

11. For examination on the merits, the claims will be interpreted as best understood.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon et al. (hereinafter "Bacon"; Pub. No.: US 2004/0192338) in view of Prince et al. (hereinafter "Prince"; Pub. No.: US 2002/0151329).

Regarding claim 1, Bacon discloses one apparatus, called Personal Mobile Companion (PMC), for use in routing mobile phone incoming call to a connected land-line house telephone as shown in Fig. 1 (Figs. 1-2, reference 102), and is connecting to:

a land-line telephone set with output, from the apparatus, (Fig. 1, reference 106) that includes DC voltage needed for activating the land-line telephone set (Fig. 7), AC voltage cycles

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needed to drive the ringer in the land-line telephone set (Fig. 7), and AC voltage for voice conversation (Fig. 7);

a regular house power outlet to receive power needed for voltage drivers (Figs. 1-2, reference 108), shown in Fig. 2B, to split house AC power into an 8V DC and an 11V DC power outputs for a connected land-line telephone and other functional components in the claimed apparatus (Fig. 7).

Bacon fails to disclose connecting to: a mobile phone headphone output port to receive ringer and voice AC signals from the connected mobile phone as input.

However, Prince discloses connecting to: a mobile phone headphone output port to receive ringer and voice AC signals from the connected mobile phone as input (page 1, paragraph [0015]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to connect the apparatus of Bacon to a mobile phone headphone output port to receive ringer and voice AC signals from the connected mobile phone as input as suggested by Prince.

One of ordinary skill in this art would have been motivated to connect the apparatus to a mobile phone headphone output port to receive ringer and voice AC signals from the connected mobile phone as input because it won't require any physical modification to the telephone unit (Prince: page 1, paragraph [0005]).

It should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. *In re Danly*, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather

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than function. In *Hewlett-Packard Co. v Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: “Apparatus claims cover what a device is, not what it does” (emphases in original). To emphasize the point further, the court added: “An invention need not operate differently than the prior art to be patentable, but need only be different” (emphases in original).

Regarding claim 2, Bacon in combination with Prince disclose the apparatus component called ring tone circuit controller as part of elements claimed in claim 1, and shown in the block diagram of Fig. 2C, which connects to voltage drivers for an 11V DC power supply (Fig. 2, reference 212);

to land-line telephone set (Fig. 1, reference 106) with a 12V AC ringer cycles when mobile phone receives incoming call and with a 3V AC signal for phone conversation (page 3, paragraphs [0028]-[0029]) and is comprised of:

one Ring Tone Generator (RTG) that is connected to a headphone outlet of a mobile phone which, upon receiving an incoming call, sends out a 3V AC signal to activate the generation of a 6 seconds high-low voltage cycles to drive the ringer of a connected land-line telephone (Fig. 7, reference 714; page 3, paragraph [0028]-[0029]);

and one Impedance Variation Detector (IVD) that, upon detecting line resistance variation caused by lifting or hanging-up land-line telephone handset, switches the 11V DC power supply to the RTG unit to silence the land-line telephone ringer or to get ready for an incoming 3V AC signal to drive the 6 seconds voltage cycles needed to set off land-line telephone ringer (page 4, paragraph [0046]; page 5, paragraphs [0048] and [0052]).

Bacon fails to disclose which connects to a mobile phone headphone output for a 3V AC signal input.

However, Prince discloses which connects to a mobile phone headphone output for a 3V AC signal input (page 1, paragraph [0015]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to connect the apparatus of Bacon to a mobile phone headphone output for a 3V AC signal input as suggested by Prince.

One of ordinary skill in this art would have been motivated to connect the apparatus a mobile phone headphone output for a 3V AC signal input because it won't require any physical modification to the telephone unit (Prince: page 1, paragraph [0005]).

It should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. *In re Danly*, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In *Hewlett-Packard Co. v Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: "Apparatus claims cover what a device is, not what it does" (emphases in original). To emphasize the point further, the court added: "An invention need not operate differently than the prior art to be patentable, but need only be different" (emphases in original).

Regarding claims 3-4, Bacon in combination with Prince discloses the claimed invention (Bacon: Fig. 7; page 3, paragraphs [0028]-[0029]; page 4, paragraph [0046]; page 5, paragraphs [0048] and [0052]) except for one high pass filter design, consists of one resistor 45, one induction coil 46, and one capacitor 47, to attenuate any low frequency signal in human voice



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domain; two capacitors, 49 and 51, to remove high frequency background noise; one pair of diode, 48 and 52, to regulate current direction and make parasitic AC voltage into positive; and one differential amplifier 59 to drive the mechanical relay.

It would have been an obvious matter of design choice to incorporate this circuitry design in the design of Bacon in combination with Prince since the applicant has not disclosed that the design solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the design of Bacon in combination with Prince. Note that the claimed circuitry design is used to detect resistance variation caused by lifting or hanging-up land-line telephone handset in order to control DC power supply to the RTG module through a mechanical relay, which is disclosed by Bacon's Fig. 7 circuitry and page 5, paragraphs [0048] and [0052].

Furthermore, it would have been obvious to one of ordinary skill in this at the time the invention was made to incorporate the circuitry design in the circuitry of Bacon in combination with Prince since it was known in the art that a high pass filter attenuates any low frequency signal in human voice domain. (See this teaching in, e.g., Patent No.: 2,535,063 issued to W.S. Halstead cited in attached form PTO-892). In addition, it would have been obvious to one of ordinary skill in this at the time the invention was made to incorporate capacitors and diodes in the design of Bacon in combination with Prince since it was known in the art that capacitors remove high frequency background noise and diodes regulate current direction.

Moreover, Bacon in combination with Prince discloses the claimed invention (Bacon: Fig. 7) including: one ring tone generator upon detecting a signal input from mobile phone (Fig. 7, reference 714; page 3, paragraph [0028]; page 4, paragraph [0046]; page 5, paragraph [0052]),

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to detect AC signal input from mobile phone (page 3, paragraph [0028]; page 5, paragraph [0052]); one normally ON mechanical relay that is placed between one IVD and one RTC units to switch off the 11 V DC power supply after the IVD unit detects the connected phone line resistance variation (page 5, paragraphs [0048] and [0052]) except for that is made of a pair of emitter and receiver diodes, a transistor to eliminate low frequency analog signal, a diode to regulate current direction, a high frequency filtering capacitor, a pair of voltage stabilizing zener diodes, and a MOSFET transistor to turn on the connection for 11V DC power supply, through a mechanical relay, to a clock generator, one mechanical relay made of one inductor and three terminals.

It would have been an obvious matter of design choice to incorporate this circuitry design in the design of Bacon in combination with Prince since the applicant has not disclosed that the design solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the ring tone generator and mechanical relay of Bacon in combination with Prince.

### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Beyette et al. (Pub. No.: US 2004/0235518), Tischer et al. (Pub. No.: US 2005/0025308), Fintel (Patent No.: US 6,704,580), Wonak et al. (Patent No.: US 6,778,824), and Uchiyama (Pub. No.: US 2002/0072390) disclose an apparatus wherein an incoming call onto a mobile telephone can be answered on a landline telephone; Davis et al. (Patent No.: 5,815,567) discloses a communication interface which provides ringing to POTS device.

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17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

18. This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims appealed. The Notice of Appeal must be accompanied by the required appeal fee.

If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application

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which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSC 12/2/05

MSC

  
SONNY TRINH  
PRIMARY EXAMINER